



Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For:
Amite County Schools

Prepared By:
Travis W. Stewart
Miss. Forestry Commission

Time Period Covered by This Plan:
2012 - 2021

Date Plan Prepared:
2012-01-23

Plan Type:
Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: 1601N04E

MISSISSIPPI FOREST STEWARDSHIP PROGRAM

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LANDOWNER INFORMATION

Name: Amite County Schools
Mailing Address: P. O. Box 378
City, State, Zip: Liberty, MS 39645
Country: United States of America
Contact Numbers: Home Number:
Office Number: 601-657-4361
Fax Number:

E-mail Address:
Social Security Number (optional):

FORESTER INFORMATION

Name: Travis W. Stewart , Forester
Forester Number: 02367
Organization: Miss. Forestry Commission
Street Address: P. O. Box 242
City, State, Zip: Liberty, MS 39645
Contact Numbers: Office Number: 601-657-8754
Fax Number: 601-657-9251

E-mail Address: tstewart@mfc.state.ms.us

PROPERTY LOCATION

County:	Amite	Total Acres:	629	Latitude:	-90.81	Longitude:	31.05
Section:	16	Township:	1N	Range:	4E		

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

DISCLAIMER

This information was derived from a small sampling of forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be relected in this plan.

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OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone

PROPERTY DESCRIPTION

General Property Information

The section is approximately 7 miles south of Liberty on the Greensburg road with Lower Centreville Road joining the north line and contains 629 acres with 583 acres being forest acres.

Water Resources

No perennial water resources were identified during a reconnaissance of the property. However, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other

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adverse effects on the soil. The following soils are identified for this property: Smithdale, Ariel, Saffell, Providence, and Gillsburg

Archeological or Cultural Resources

These areas can range from churches, old cemeteries or Indian mounds to old home sites or other areas of historical significance.

No Archeological or Cultural resources were identified during a reconnaissance of the property. However, if Archeological or Cultural resources are discovered anytime on the property special managements measures will be applied immediately in order preserve these sensitive areas.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

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Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

SOIL TYPES

Smithdale

The Smithdale component makes up 90 percent of the map unit. Slopes are 8 to 35 percent. This component is on hillslopes. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. Loblolly Site Index = 86. Longleaf Site Index = 69. Slash Site Index = 85.

Ariel

The Ariel component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water

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to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 95.

Saffell

The Saffell component makes up 90 percent of the map unit. Slopes are 8 to 30 percent. This component is on hillslopes on hills. The parent material consists of gravelly alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Providence

The Providence component makes up 90 percent of the map unit. Slopes are 2 to 5 percent. This component is on uplands. The parent material consists of silty loess over sandy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. Loblolly Site Index = 87. Longleaf Site Index = 73.

Gillsburg

The Gillsburg component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

STRATA

Strata 1 - Stands 2, 7, 10, 21

Stand Description

114.54 Acres

Stands 2 (74.02 ac), 7 (16.29 ac), 10 (8.45 ac), 21 (15.78 ac)

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Strata 1 consist of sub-merchantable pine plantation. This plantation was planted in January/February of 2005. There are approximately 600 trees per acre in these plantations. These stands are well drained, and they could be logged 8 to 10 months of the year. Accessibility to the stand is good.

Stand Recommendations

A first thinning is scheduled in 2021. Every fourth row will be removed with thinning to take place in the remaining rows. It will focus on removing poor quality, diseased, or poor formed trees. Residual stocking will be 70 square feet per acre.

A prescribed burn can be implemented to improve wildlife browse, reduce hardwood brush, and reduce wildfire danger. An understory of hardwood saplings and privet hedge could become a problem in this stand. This is a problem that would diminish the quality of forage available for wildlife, as well as, diminishing the quality of wildlife habitat and forest health. In the future, the stand may need to be chemically sprayed to control such species, or a prescribed burn could be implemented. Optimally both practices could be used. If the combination is used, the burn should be implemented on a 2 to 3 years rotation after the spraying is completed. This will restore a more healthy wildlife habitat and forest. The prescribed burn will help control the unwanted understory vegetation. The burn will also allow more sunlight to reach the ground, spurring growth of new forage for wildlife species. All roads and firelanes should be maintained annually, and the stand should be grown to a 35 year rotation.

Activity Recommendations

Harvest

A first thinning is scheduled in 2021. Every fourth row will be removed with thinning to take place in the remaining rows. It will focus on removing poor quality, diseased, or poor formed trees. Residual stocking will be 70 square feet per acre.

Strata 4 - 1,4,5,12,14,20,24,26,28,16

Stand Description

25.71 Acres

Stands 1 (6.9 ac), 4 (6.93 ac), 5 (2.55 ac), 12 (1.5 ac), 14 (0.68 ac), 20 (1.66 ac), 24 (1.91 ac), 26 (1.15 ac), 28 (1.58 ac), 16 (0.85 ac)

Strata 4 is comprised of a pulpwood pine plantation that was planted in 1985. The strata has an average basal area of 110 with 450 trees per acre.

Strata Recommendations

Due to the small acreages of the stands in this strata, as well as, the distance between stands, this strata will be regenerated back into loblolly pines along with adjacent stands. Stands 20, 26, and 28 will have a regeneration harvest in 2013. Stands 4 and 5 will have

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a regeneration harvest in 2018. Stands 1, 12, 14, 16, and 24 do not have any harvest activities planned during the period of this management plan.

Activity Recommendations

Harvest

2013 - Stands 20, 26, and 28 will have a final regeneration harvest.

2018 - Stands 4 and 5 will have a final regeneration harvest.

Site Preparation

2014 - Stands 20, 26, and 28

2019 - Stands 4 and 5

An aerial application of herbicide will be applied following the harvest. The type of chemical and rates of application will be determined following the timber harvest.

Regeneration

2014 - Stands 20, 26, and 28

2019 - Stands 4 and 5

These stands will be regenerated with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Strata 5 - 3,8,11

Strata Description

105.94 Acres

Stands 3 (1.2 ac), 8 (83.1 ac), 11 (21.64 ac)

This strata consist of pine sawtimber with areas of mixed pine and hardwood sawtimber. It is approximately 74 years old. The understory consists of hardwood underbrush about 8-15 feet high. These stands were thinned 15-18 years ago.

Stand Recommendations

This strata will be maintained until the final harvest planned for 2018. The strata will then be chemically site prepped and planted with 2nd generation loblolly pines.

Activity Recommendations

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Harvest

This strata will be final harvested in 2018.

Site Preparation

In 2019, an aerial application of herbicide will be applied following the harvest. The type of chemical and rates of application will be determined following the timber harvest.

Regeneration

In 2019, this strata will be regenerated with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Strata 6 - 13,18,23,29

Stand Description

68.59 Acres

Stands 13 (22.13 ac), 18 (28.53 ac), 23 (15.49 ac), 29 (2.44 ac)

This strata consists streamside management zones. It consists of mainly hardwoods, but has scattered pines in areas. It is approximately 62 years old.

Stand Recommendations

There are no planned activities during the period of this management plan. This strata will remain in hardwood and follow Best Management Practices. Some thinning out of pine trees could take place during harvest activities of adjacent stands.

Strata 7 - 22,15,27

Strata Description

125.91 Acres

Stands 22 (89.64 ac), 15 (29.69 ac), 27 (6.58 ac)

This strata consist of pine sawtimber with areas of mixed pine and hardwood sawtimber. It is approximately 69 years old. The understory consists of hardwood underbrush about 8-15 feet high. These stands were thinned 15-18 years ago.

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Strata Recommendations

This strata will be maintained until the final harvest planned for 2013. The strata will then be chemically site prepped and planted with 2nd generation loblolly pines.

Activity Recommendations

Harvest

This strata will be final harvested in 2013.

Site Preparation

In 2014, an aerial application of herbicide will be applied following the harvest. The type of chemical and rates of application will be determined following the timber harvest.

Regeneration

In 2014, this strata will be regenerated with genetically improved loblolly pine seedlings. Containerized seedlings will be used if available and will be planted on a 8 x 10 spacing.

Strata 8 - 9,17

Strata Description

142.42 Acres

Stands 9 (130.73 ac), 17 (11.69 ac)

This strata consist of hand planted containerized loblolly pine which was planted in January/February of 2011. The area was clear cut in late 2009, and chemically site prepped in the Fall of 2010. There are approximately 664 trees per acre.

Strata Recommendations

This strata will be grown to a 35 year rotation before a final harvest and reforestation is planned. There will be a 1st and 2nd thinning planned during this rotation, but there are currently no planned harvesting activities for the duration of this management plan. This strata is currently serving as excellent cover and bedding areas for wildlife, and it will continue serving in this capacity for the duration of this plan.

OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

The boundary lines are being established and maintained to protect school board property from trespass.

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Line Recommendations

Once established, the boundary lines will need to be maintained on a 5 to 6 year rotation. The north line will be repainted in 2014, and the west line will be repainted in 2017. Some boundary lines need to be resurveyed when an active timber sale is planned on that property line.

Activity Recommendations

Property Activities

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

Property Activities

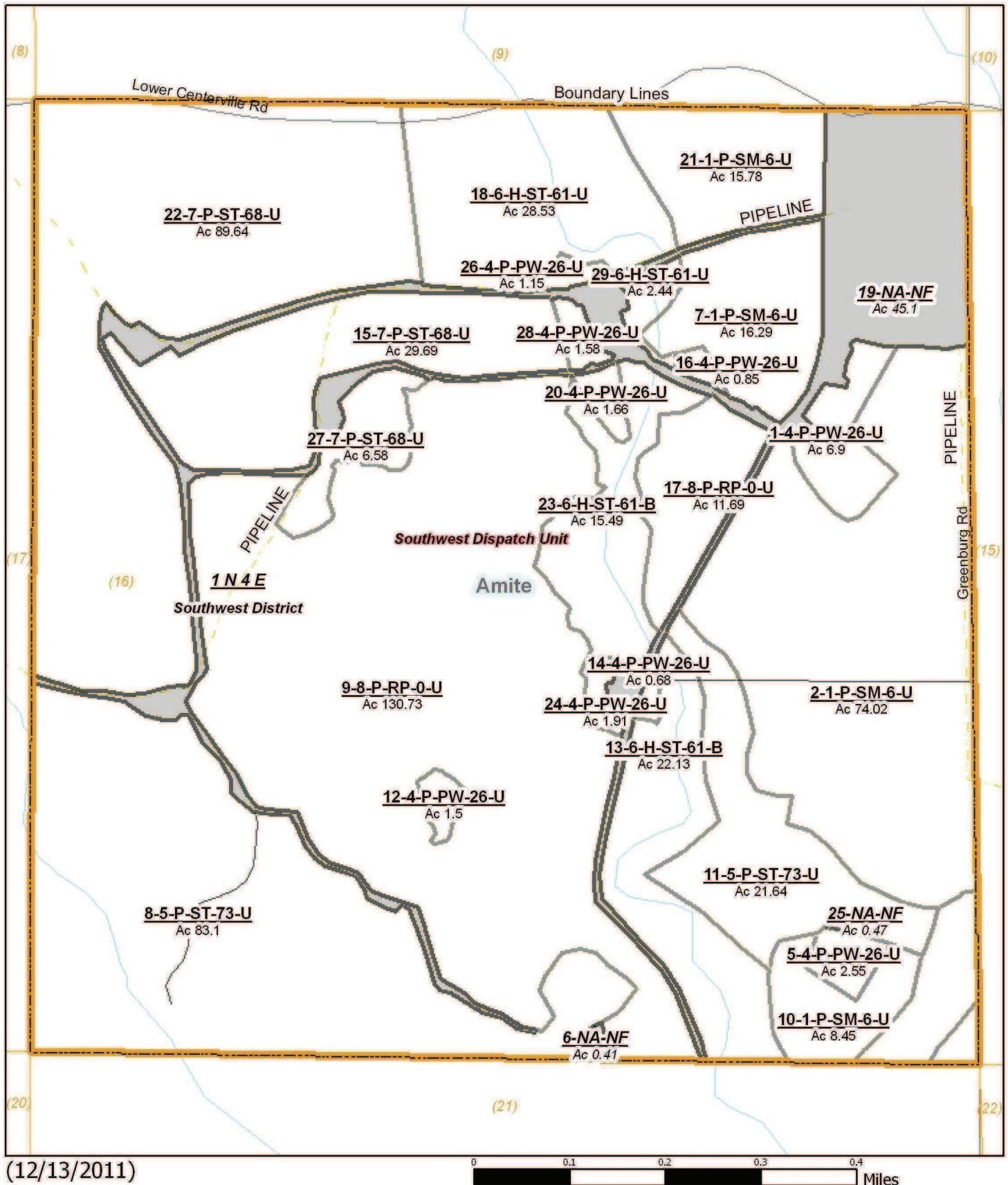
The north property line will be repainted in 2014.

The west property line will be repainted in 2017



Amite County Schools

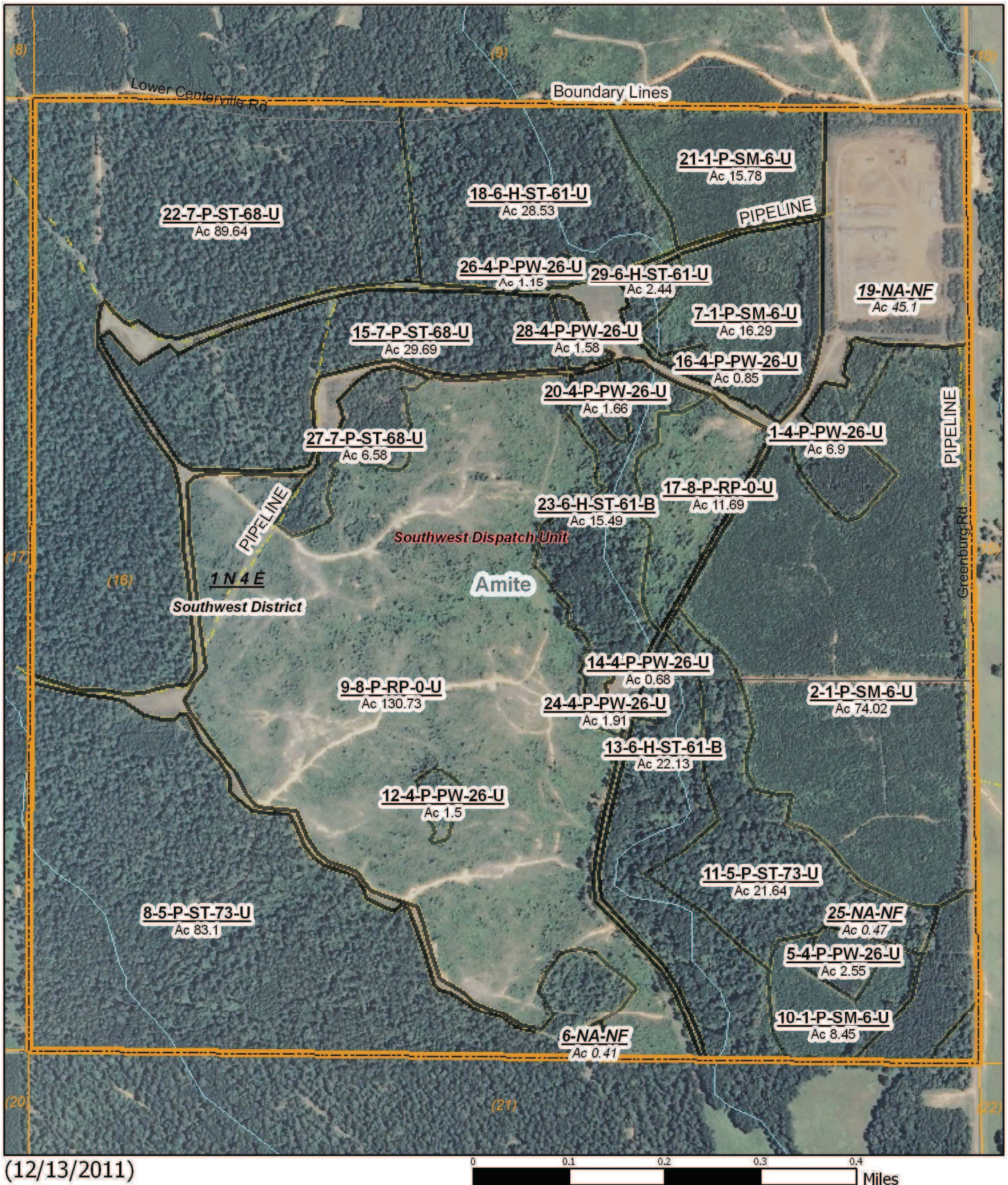
S16, 1N-4E
2011 to 2021
629.08 Acres +/-





Amite County Schools

S16, 1N-4E
2011 to 2021
629.08 Acres +/-



AMITE S16-1N-4E



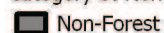
Property



Category 1: Stands



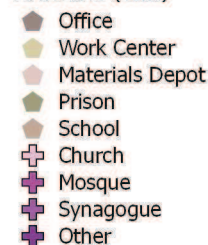
Category 3: Non-Forest Stands



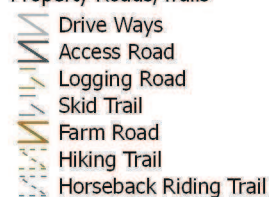
Structures



Structures (cont)



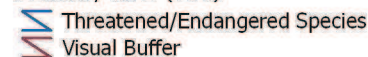
Property Roads/Trails



Boundary Lines



Boundary Lines (cont)



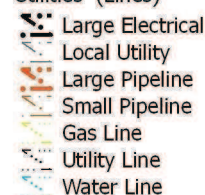
Transportation (Lines)



Hydrology (Lines)



Utilities (Lines)



Stand Activity Summary for
Amite County Schools
16 1N 4E

Filters Applied: County: Amite
Client Class: School Trust Land
District: Southwest District
Client: Amite County Schools
STR: 16 1N 4E
Activity:
Year: 2012 Through 2021

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue
2013						
16 1N 4E	4	20	Harvest, Mechanical, Regeneration, Machine, Loblolly	2	\$70.00	\$580.00
16 1N 4E	4	26	Harvest, Mechanical, Regeneration, Machine, Loblolly	1	\$35.00	\$290.00
16 1N 4E	4	28	Harvest, Mechanical, Regeneration, Machine, Loblolly	2	\$70.00	\$580.00
16 1N 4E	7	15	Harvest, Mechanical, Regeneration, Machine, Loblolly	30	\$1,050.00	\$57,366.90
16 1N 4E	7	22	Harvest, Mechanical, Regeneration, Machine, Loblolly	90	\$3,150.00	\$172,100.70
16 1N 4E	7	27	Harvest, Mechanical, Regeneration, Machine, Loblolly	7	\$245.00	\$17,014.34
Yearly Totals				132	\$4,620.00	\$247,931.94
2014						
16 1N 4E	4	20	Site Preparation, Chemical, Broadcast, Aerial, Combination	2	\$200.00	\$0.00
16 1N 4E	4	20	Regeneration, Artificial, Plant, Hand, Loblolly	2	\$200.00	\$0.00
16 1N 4E	4	26	Regeneration, Artificial, Plant, Hand, Loblolly	1	\$100.00	\$0.00
16 1N 4E	4	26	Site Preparation, Chemical, Broadcast, Aerial, Combination	1	\$100.00	\$0.00
16 1N 4E	4	28	Regeneration, Artificial, Plant, Hand, Loblolly	2	\$200.00	\$0.00
16 1N 4E	4	28	Site Preparation, Chemical, Broadcast, Aerial, Combination	2	\$200.00	\$0.00
16 1N 4E	7	15	Regeneration, Artificial, Plant, Hand, Loblolly	30	\$3,000.00	\$0.00
16 1N 4E	7	15	Site Preparation, Chemical, Broadcast, Aerial, Combination	30	\$3,000.00	\$0.00
16 1N 4E	7	22	Site Preparation, Chemical, Broadcast, Aerial, Combination	90	\$9,000.00	\$0.00
16 1N 4E	7	22	Regeneration, Artificial, Plant, Hand, Loblolly	90	\$9,000.00	\$0.00

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
16 1N 4E	7	27	Regeneration, Artificial, Plant, Hand, Loblolly	7	\$700.00	\$0.00	
16 1N 4E	7	27	Site Preparation, Chemical, Broadcast, Aerial, Combination	7	\$700.00	\$0.00	
				Yearlv Totals	264	\$26,400.00	\$0.00
2018							
16 1N 4E	4	4	Harvest, Mechanical, Regeneration, Machine, Loblolly	7	\$242.55	\$2,009.70	
16 1N 4E	4	5	Harvest, Mechanical, Regeneration, Machine, Loblolly	3	\$105.00	\$405.00	
16 1N 4E	5	3	Harvest, Mechanical, Regeneration, Machine, Loblolly	1	\$35.00	\$1,765.05	
16 1N 4E	5	8	Harvest, Mechanical, Regeneration, Machine, Loblolly	83	\$2,908.50	\$146,675.66	
16 1N 4E	5	11	Harvest, Mechanical, Regeneration, Machine, Loblolly	22	\$757.40	\$38,195.68	
				Yearlv Totals	116	\$4,048.45	\$189,051.09
2019							
16 1N 4E	4	4	Site Preparation, Chemical, Broadcast, Aerial, Combination	7	\$693.00	\$0.00	
16 1N 4E	4	4	Regeneration, Artificial, Plant, Hand, Loblolly	7	\$693.00	\$0.00	
16 1N 4E	4	5	Regeneration, Artificial, Plant, Hand, Loblolly	3	\$255.00	\$0.00	
16 1N 4E	4	5	Site Preparation, Chemical, Broadcast, Aerial, Combination	3	\$255.00	\$0.00	
16 1N 4E	5	3	Site Preparation, Chemical, Broadcast, Aerial, Combination	1	\$100.00	\$0.00	
16 1N 4E	5	3	Regeneration, Artificial, Plant, Hand, Loblolly	1	\$100.00	\$0.00	
16 1N 4E	5	8	Site Preparation, Chemical, Broadcast, Aerial, Combination	83	\$8,310.00	\$0.00	
16 1N 4E	5	8	Regeneration, Artificial, Plant, Hand, Loblolly	83	\$8,310.00	\$0.00	
16 1N 4E	5	11	Site Preparation, Chemical, Broadcast, Aerial, Combination	22	\$2,164.00	\$0.00	
16 1N 4E	5	11	Regeneration, Artificial, Plant, Hand, Loblolly	22	\$2,164.00	\$0.00	
				Yearlv Totals	230	\$23,044.00	\$0.00
2021							
16 1N 4E	1	2	Harvest, Mechanical, 1st Thin, Machine, Loblolly	74	\$2,590.00	\$19,980.00	

STR	Strata	Stand	Activity	Acre	Est. Cost	Est. Revenue	
16 1N 4E	1	7	Harvest, Mechanical, 1st Thin, Machine, Loblolly	16	\$570.15	\$4,398.30	
16 1N 4E	1	10	Harvest, Mechanical, 1st Thin, Machine, Loblolly	8	\$295.75	\$2,281.50	
16 1N 4E	1	21	Harvest, Mechanical, 1st Thin, Machine, Loblolly	16	\$552.30	\$4,260.60	
				Yearly Totals	115	\$4,008.20	\$30,920.40
				Grand Totals	857	\$62,120.65	\$467,903.43